

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-353
Relating to Certification of New Motor Vehicle Heavy-Duty Engines

GENERAL MOTORS CORPORATION

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102, and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-3;

IT IS ORDERED AND RESOLVED: That the following General Motors Corporation 1986 model-year heavy-duty diesel engines have shown compliance with the optional transient test procedure and standards and are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating greater than 8500 pounds:

| <u>Engine Family</u> | <u>Displacement Cubic Inches (Liters)</u> | <u>Exhaust Emission Control Systems (Special Features)</u> |
|----------------------|---|--|
| GGM06.2DABX | 379 (6.2) | Engine Modification (Diesel Injection - Prechamber) |

Engine models and codes are listed on attachments.

The following are the certification emission values for these engine families:

| <u>Engine Family</u> | <u>Hydrocarbons gm/bhp-hr</u> | <u>Carbon Monoxide gm/bhp-hr</u> | <u>Nitrogen Oxides gm/bhp-hr</u> |
|----------------------|-----------------------------------|--|--------------------------------------|
| GGM06.2DABX | 0.6 | 3.4 | 3.6 |

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order.

Executed at El Monte, California this 17th day of July, 1985.


K. D. Drachand, Chief
Mobile Source Division

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer GENERAL MOTORS CORPORATION
Engine Family GGMO6.2DABX CID (Liter)-Type 379 (6.2) - V8
ECS (Special Features) EM, DIP

| Engine Model (Engine Code) | Fuel Injection Pump Mfr. | Injector Mfr. | Maximum Rated HP and RPM | Fuel Rate at Maximum HP | Label Ident. |
|-------------------------------|--------------------------------|---|--------------------------------|----------------------------------|-----------------|
| | Part Number | Part Number | | mm ³ /stroke | Part Number |
| V8-6.2 (1) | Stanadyne 23500346 | Bosch 14061511 (CKP 20,30 Models) | 155@3600 | 48.5 | WBD 23500328 |
| V8-6.2 (2) | Stanadyne 23500407 | Bosch 14045223 (G30 Models) | 150@3600 | 46.5 | |
| V8-6.2 (3) | Stanadyne 23500408 | Bosch 14061511 (CKP 20,30 Models) | 145@3600 | 45.5 | |
| V8-6.2 (4) | Stanadyne 23500409 | Bosch 14045223 (G30 Models) | 140@3600 | 43.5 | |

ATTACHMENT II

Some product improvement changes have been applied to the V8-6.2 engine family during the past two years since durability engine S/N 24400-380A was run to develop transient deterioration factors for the 1985 model year. All of the improvements to the engine family should have a positive effect on the control of exhaust emissions emitted from the engine. The following is a list of engine changes since the durability engine was tested:

| <u>Change</u> | <u>Remarks</u> |
|--------------------------------|--|
| Reverse Throat Prechamber | Improves exhaust smoke opacity and engine noise level (engine codes 1, 2, 3, 4). No change in compression ratio. |
| Stamped Rocker Arm | Reduces bushing wear. |
| Air Cleaner Inlet Screen Added | Prevents foreign objects from falling into engine when air cleaner is removed. |
| Injection Pump Improvements | Added fuel filter for timing advance piston, Viton seals, nickel plated advance piston, increased load delivery valve spring and seat and compressed Viton governor isolators. |
| Glow Plug Controller | Electronic glow plug controller and relay. |
| Crankshaft | Improved polishing of bearing surfaces. |